

## © EPODOC / EPO

PN - JP7051677 A 19950228  
TI - COMBINED ION AGGREGATING DEVICE  
FI - C02F 1/46&102 ; C02F 1/52&Z  
PA - TOKYO YOGYO KK  
IN - TOCHIKUBO SHIGEO  
AP - JP19930228228 19930819  
PR - JP19930228228 19930819  
DT - I

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AN - 1995-127550 [17]  
TI - Composite ion aggregating apparatus - having anode or magnesium, aluminium or iron, and cathode in stable graphite or stainless steel.  
AB - J07051677 An appts. has an anode of Mg, Al or Fe, forming positive charged polyvalent ion electrolysing and a cathode of physically and chemically stable graphite or stainless steel, metal ion in flocculant is changed to soluble polymer ion during the electrolysing and pollutants in waste water are neutralized by the metal ion, the soluble polymer ion and hydroxide.  
- USE - For aggregating colloid components in waste water.  
- (Dwg. 1/3)  
IW - COMPOSITE ION AGGREGATE APPARATUS ANODE MAGNESIUM ALUMINIUM IRON CATHODE STABILISED GRAPHITE STAINLESS STEEL  
PN - JP7051677 A 19950228 DW199517 C02F 1/463 006pp  
IC - C02F 1/463 ; C02F 1/465 ; C02F 1/52  
MC - D04-A01M J03-B02  
- X25-H03  
DC - D15 J03 X25  
PA - (TOLY) TOKYO YOGYO KK  
AP - JP19930228228 19930819  
PR - JP19930228228 19930819

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PN - JP7051677 A 19950228  
TI - COMBINED ION AGGREGATING DEVICE  
AB - PURPOSE: To efficiently aggregate and agglomerate ions by changing the metal ion of a flocculant into a soluble polymer ion with hydroxide ion to promote the formation of hydroxide and neutralizing the charge of the material to be removed with a fresh metal ion of the anode self, the soluble polymer ion and hydroxide.  
- CONSTITUTION: A positive electrode 15 is connected to an aluminum base plate electrode 7 and a negative electrode 17 is connected from outside a liq. surface 16 to generate a positively charged polyvalent ion 18 of aluminum and a polymer ion 18 by electrolysis. In this case, the flocculant of metal salt simultaneously injected is combined with OH<sup>-</sup> generated in large quantities by electrolysis, hydrolyzed and polymerized to form a soluble polymer ion. The charged dispersed particles are neutralized, cross-linked by the insoluble aluminum hydroxide simultaneously generated, agglomerated and floated to form a scum 12. An external fresh raw liq. is then introduced from an opening 5, and the process is repeated.  
I - C02F 1/463 ; C02F 1/465  
SI - C02F 1/52

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none

none

none

PA - TOKYO YOGYO CO LTD  
IN - TOCHIKUBO SHIGEO  
ABD - 19950630  
ABV - 199505  
AP - JP19930228228 19930819

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none

none

none

